

CLAIMS

1. A device for opening and closing a passage comprising: a door (40) having a door shaft (41), which becomes the center of rotation, and also having a plate-shaped door portion (42) for opening and closing an opening portion (50, 51); and a case (11) having a bearing hole (52) for pivotally holding the door shaft (41) and also having the opening portion (50, 51), wherein

the opening portion (50, 51) of the device for opening and closing a passage is a passage in which air flows, and an elastic packing member (43, 143, 243) for reducing clearance between the door shaft (41) and the bearing hole (52) is attached to at least one of the door shaft (41) and the bearing hole (52).

2. A device for opening and closing a passage according to claim 1, wherein the door shaft (41) is provided with a large diameter shaft portion (41a) and a small diameter shaft portion (41b), and the packing member (43, 143, 243) is attached to only the small diameter shaft portion (41b) in the large diameter shaft portion and the small diameter shaft portion.

3. A device for opening and closing a passage according to claim 1, wherein the packing member (43) is attached to the door (40), and one piece of the packing member covers one face of the door portion (42) and one portion of the door shaft (41) in the circumferential direction.

4. An air conditioner for vehicle use including a device for opening and closing a passage described in claim 1, wherein a heat exchanger (12) for cooling air and a heat exchanger (13) for heating air are arranged in the case (11) of the device for opening and closing a passage, and the opening (50, 51) of the device for opening and closing a passage is a passage in which air circulates.

5. An air conditioner for vehicle use according to

claim 4, wherein the door (40) of the device for opening  
and closing a passage is an air mixing door for adjusting  
a ratio of the volume of a cold air cooled by the heat  
exchanger (12) for cooling to the volume of a hot air  
5 heated by the heat exchanger (13) for heating.